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26th ALL-UNION CONGRESS OF SURGEONS

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SOME RESULTS EFFECTED SINCE THE DECISIONS OF THE
26th ALL-UNION CONGRESS OF SURGEONS

[This is a translation of an article written by N. Rachinskava and N. Rukin in Khirurgiya (Surgery), No. 1, Moscow, 1960, pages 133-137.]

During the 26th All-Union Congress of Surgeons which took place from the 22nd to the 27th of January, 1955, the work discussed in reports concerned four problems: physiological bases of recent surgery (pre-operative, operative and post-operative periods), surgical treatment of heart diseases, surgical treatment of lung lesions, and intestinal blockage.

The questions on the surgery of the organs of the thoracic cavity were discussed previously at several meetings, but at the 26th Congress they were put on a large-scale basis and radical operations on the heart and its congenital and acquired lesions were covered. Radical lung operations - after cancer, tuberculosis and purulent processes - were discussed.

Also, the development of the surgery of thoracic organs which already has a long history, was discussed, but immediately after the 26th Congress thoracic surgery received a considerable development. Decisions were accepted during this Congress, which further directed the development of these surgical sections, utilizing the experience of the leading medical organizations of the country.

This is bound with a wide introduction of the practice of physiological research methods on patients indicated for surgery, and particularly with regard to the great distribution of methods of diagnosis and registration with the aid of special apparatuses for assaying the functionality of the heart vascular system, respiratory and other systems, which are the most important systems in the preoperative period, as well as, and especially during operations, and the testing of the correction of altered functions. Secondly, the decisions were concerned with the organization work undertaken by the scientific society of surgeons, leading surgical clinics of the country, the Department of Public Health of the U.S.S.R. and the Academy of Medical Sciences U.S.S.R.

This organizational work was first concerned with the propagandizing of achievements in thoracic surgery by wide publication, in the creation of leadership, in the publication of these problems in monographs and books for practical physicians, in the wide publication of scientific articles elucidating special problems in scientific journals, and in relating the experiences of Soviet doctors and foreign surgeons. Interest was shown in the development of methods for the preparation of new specialists (work organized for departments of thoracic surgery at institutes for testing the qualifications of physicians), and in the provisions of instruments, devices, apparatuses and drugs which are necessary items for the development of thoracic surgery. Thirdly, the Congress was concerned with the creation of an ultra-scientific center for the problems of thoracic surgery - the Institute of Thoracic Surgery, A.M.S., U.S.S.R.

A decree (no. 86) from the Department of Public Health, was issued on the organization of specialized surgical sections for the treatment of patients with lesions of the organs of the thoracic cavity (in total, for 750 beds). This was in accordance with the decisions of the 26th Congress of Surgeons, April 16th, 1955. This decree established permanent norms for these sections, elaborated with estimates the grave conditions of patients especially in the pre-operative periods, and forecasted the conditions of the newly-opened sections and their equipment needs. At the present time forty-five sections of thoracic surgery have been opened. The work of equipping these sections was contracted from 1955 to 1958 and a wide assortment of medical apparatuses and instruments are manufactured by series in factories of this category, for example: apparatus for the suturing of blood vessels, suturing of "culti-bronch" for aspiration, for the suturing of the lobar and segmentary bronchi, for sampling inside the heart, for suturing the auricle of the heart, a three-sided valvetotome, a dilator for the heart valves, clamps for the auticle, commissurotome with ring, hemostat clamp, a two-sided dilator for the heart, a clamp for the temporary constriction of the aorta and pulmonary artery, a wedge-shaped clamp for the section of the lungs, apparatus for the estimation of the basal metabolic rate, apparatus for the coagulation and section of tissues by high frequency current, cardioscopes for visual observations on electrocardiograms, electrocardiographs with direct ink graphing, a phono-cardiographic attachment with semi-conducting triodes, apparatus for artificial respiration, apparatus for the administration of oxygen, and other equipment.

It is true that most of the mentioned items are presently manufactured in very insufficient amounts and that they are very expensive and seldom accessible, even for the hospitals and clinics of the capital city.

The Institute for Thoracic Surgery of the A. M. S., U.S.S.R., created in February 1956, performs clinical and scientific work and as well, functions extramurally, organizing the calculation, estimation, and distribution of diseases, the calculations of surgical results in the field of thoracic surgery throughout the organizations of the U.S.S.R., and it functions in the fulfillment of the educational preparation of surgeons, and as well, the Institute contributes to the continuation of their medical experience.

Over two-hundred physicians were educated in the Institute in 1957 and 1958 on the questions of thoracic surgery and anesthesiology through practical work.

Measures concerned with the development of thoracic surgery and particularly with heart surgery, were also laid down according to special plan and elaborated in conjunction with the Institute of Thoracic Surgery which foresees the setting up of new sections in several of the clinical organizations in the Union Republics; the education of students was organized not with the purpose of teaching individual surgeons, but in order to teach groups which consisted of a surgeon, an anesthesiologist and a radiologist in accord with the experience of the Institute of Thoracic Surgery as well as with the experiences of other organizations which have had practice in the field of thoracic surgery. At the Institute of Surgery of A. M.N., U.S.S.R., named after A. V. Vishnevski (Director: Professor A. A. Vishnevski), at the Department of Clinical Surgery of IMOLMI (Chief: Professor B. V. Petrowski), at the Department for the Improvement of Physicians' Standards, of the Military Medical Academy, named after S. M. Kirov (Chief: Professor P. A. Kuptianov), at the Department of Clinical Surgery of the Kuibyshev Medical Institute (Chief: Professor S. L. Libov), at the Departments of TsIU, Moscow (Chief: Professor E. N. Meshalkin) and of GIGUV, Kiev (Chief: Professor M. M. Amosov).

In 1958, in total 21 groups were trained for the cities of Smolensk, Minsk, Erevan, Ashkhabad, Stalingrad, Frunze, Magnitogorsk, Rostov-na-Donu, Tbilisi, Alma-Ata, Baku, Kishinev, Samarkand, Stalinabad, Simferopol, Lvov, Kharkov, Kiev, Stalino and Novosibirsk. In their turn these newly-created sections of thoracic surgery became the basis for the education of the youth.

As well, the Institute of Thoracic Surgery sent a group of physicians to the Riga Medical Institute where they worked for some months and taught a group of qualified physicians surgical methods for the handling of mitral stenosis, performed operations on the heart, and gave lectures on the problems of thoracic surgery.

Youth education was also undertaken at the Departments of Surgery, where since 1957, 216 physicians helped to improve educational standards. As well, a great deal of work was done in relation to the education of young men in thoracic surgery, though the field is still insufficiently staffed in regard to the demands incumbent on the practice of public health.

The following data collected by the Institute of Thoracic Surgery characterizes the situation in the practice of thoracic surgery in the country: just before the 26th Congress of Surgeons lung and heart operations were performed in 149 organizations of 84 republic, and district hospitals and clinics. In total there were 4,015 lung operations including 1,257 pneumonotomies and involving the heart in 456, of these latter 262, i. e., more than half were because of heart wounds. By 7/1/1957 in all the medical institutions of the country thoracic cavity operations were undertaken in 306 such organizations. In total, 19,593 radical lung operations were performed and the number of pneumectomies and lobectomies was considerably increased while the number of pneumonotomies was reduced. The number of deaths decreased considerably after surgery. A sharp increase in the number of radical heart operations occurred, which by 7/1/1957 had reached 4,079 including about 1,500 commissurotomies and 864 operations on congenital heart lesions. The number of post-operative deaths considerably decreased: for example, in the ligature of Botallo's duct mortality was 4.8%.

On the basis of the data which we can use at the present time, the number of organizations which undertake operations on the heart and lungs has increased even more. Firstly, the above mentioned figures, if they do not completely cover the situation, do give a correct and objective presentation on the direct development and such data points out the general progress of surgery on the organs of the thoracic cavity and especially so in relation to progress in heart surgery.

Progress in the development of surgery and success in the scientific research on surgical problems are characterized as well by the publication of papers in the

scientific press, and the publication of books concerned with these problems. In 1952 only 4 books were published on the questions of thoracic surgery, and in contrast from 1955 to 1958, 68 books and 81 dissertation papers were published. Of these, 63% were written in Moscow and Leningrad and 37% in the other cities of the Soviet Union. Among the published books are such excellent textbooks as the book by Academician A. N. Bakulev and Professor E. N. Meshalkin which was entitled "Inate Lesions of the Heart". Professor F. G. Uglov "Cancer of the Lungs", Professor V. I. Struchkov "Surgery of Chronic Purulent Pneumonitis", Professor P. A. Kupriyanov "Surgery of Purulent Pneumonitis and Pleuritis", the textbook under the editorship of Academician A. N. Bakulev "Mitral Lesions of the Heart", and other texts.

The number of articles on the problems of thoracic surgery published in scientific medical journals has considerably increased. Propaganda on the questions of surgery had great significance in creating faith among the people in the favorable results obtained surgically. Throughout this period many articles and notes on thoracic surgery were published in the general press. Over 150 articles which elucidated the problems of thoracic surgery appeared in newspapers in the second half of 1958 alone, according to the data of the Institute of Thoracic Surgery. These were mainly about heart operations. As well, various articles concerned with these problems were published in popular magazines. The popular scientific articles of Professor A. A. Vishnevski and other authors have been published since 1956. The following popular scientific books were published in 1958: "On Heart Surgery" by Professor A. N. Bakulev (published under the "Young Guard"), "Man Will Live", a fictionalized science book by Dr. M. B. Tsentsiper.

The All-Union Society for the Distribution of Political and Scientific Studies will give several lectures on the questions of thoracic surgery in Moscow and other cities. All of this activity contributes to the better understanding of the task which lies before the field of thoracic surgery. The perspectives for the development of thoracic surgery are great, especially as there is a great need for operations of this kind of surgical aid.

At the present time as an aid to the Department of Public Health of the U.S.S.R., the Institute of Thoracic Surgery registers children suffering from congenital cardiac lesions. Throughout the whole pediatric service special

charts are mailed for the personal calculation of children suffering from this ailment.

The network of organizations occupied with heart surgery is as yet not great, and their possibilities are restricted. The greatest organization in the country - The Institute of Thoracic Surgery, which has increased its number of beds up to 250 after being transferred to a specially created building, cannot handle more than 2,000 persons a year for surgery. Hence the necessity for further enlarging this type of well qualified aid to the population arises, and the further development of scientific work in this most important field of modern medicine is necessary.

The development of thoracic surgery is closely bound with the achievements of modern anesthesiology. In January 1956 a committee of the Department of Public Health of the U.S.S.R. discussed questions on measures for the improvement of standards in the fields of anesthesiology and accepted decisions and issued decrees no. 251 (11/29/1956) and no. 252 (12/14/1956), which contributed to the further development of anesthesiology. In accordance with these decisions, the Academy of Medical Sciences of the U.S.S.R. created a commission to deal with the problems of anesthesiology and it elaborated a plan of scientific research for 1958 and for the period 1959 - 1965. Sections of anesthesiologists were set up at All-Union, Moscow and Leningrad, and scientific societies of surgeons were organized. The teaching of young anesthesiologists is undertaken at the departments of thoracic surgery and anesthesiology in the Institute for the Improvement of Physicians' Qualifications in Tbilissi GIGUD (an independent department of anesthesiology). One-hundred-seventy-one persons have been educated from 1956 to 1958. As well, the heads of clinical departments were organized for the teaching of specialists and anesthesiologists from aspirants (graduate assistants). The plan forecasts the education of 8 aspirants and 15 clinical organizers in 1957 - 1959. Permanent regulations were set up for the organization of group anesthesiologists in hospitals on the basis of one physician and two middle level medical workers for 400 beds of surgical cases (decree no. 251). At the local level of organization the fulfillment of the conditions of this decree and their actual introduction encounters various difficulties.

Two laboratories of anesthesiology were created in the Institute of Thoracic Surgery of the A.M.N. of the U.S.S.R. and at the Department of Clinical Surgery of IMOLMI. Apparatuses for gas anesthesia were worked out and

manufactured, however, with great delay. From 1956 to 1958 2,550 stationary, 450 portable and 665 small apparatuses for anesthesia were manufactured. The most recent models of anesthesia apparatuses were reported including electroencephalographs, sets of laryngoscopes, guiding final pulsators, several other items, and other devices needed in the performance of modern anesthesia.

The industry of the country has organized the manufacturing of several drugs for total anesthesia such as amitozin, nitrous oxide, diplacine and others, but the practical issuance and mass production of such vital drugs as diplacine, dithelene, cytopropone, and others proceeds very slowly.

In accord with the development with the ideas and decision of the 26th Congress of Surgeons of the U.S.S.R. in September, 1958 in Kazan, an All-Union Conference of Surgeons, Anesthesiologists and Traumatologists took place, in which results were summarized and paths were charted for the future development of these matters in the country. These results were concerned with the problems of anesthesiology and the treatment of bone fractures considered during the period after the 26th Congress. The Department of Public Health of the U.S.S.R., summarizing the results of this conference, prepared material on the problems of anesthesiology and these problems were discussed in a symposium of the Department of Public Health of the U.S.S.R. in May 1959.

In relation to the problem of intestinal blockage, it was noted in the 26th Congress of Surgeons that the treatment of intestinal blockage could not be considered adequate although the indices of the results of treatment have been improved from year to year. In 1954 the post-operative mortality in regard to intestinal blockage was 80.1% in city hospitals and in 1957 it was 60.6%; in village districts the rates for these years were 25.1% and 20.7% respectively.

The late times of the admittance of patients (24 or more hours after the onset of disease) were shortened from 30.4% in 1954 to 26.2% in 1957, and in village hospitals from 43.3% to 34.9% respectively.

The problems of intestinal blockage were discussed after the Congress in several Republic and district conferences and surgeons' meetings. Several monographs were published on intestinal blockage (Professors V. I. Struschkov, D. P. Chukhrienko and others); great attention was paid therein to the problems of early diagnosis and early hospitalization of intestinal blockage.

The chief public health surgeon of the Department of Public Health of the U.S.S.R. elucidated the problems of intestinal blockage in his organizational report on the All-Union Conference of Surgeons, Traumatologists and Anesthesiologists in 1956.

In the Ukraine and several other Republics and districts courses on the improvement of the qualifications of physicians and surgeons are given mainly for the village districts, and special attention is paid to the question of emergency aid for operative cases.

It must be considered as positive that the decisions of the 26th Congress in relation to intestinal blockage, have already expounded very precise scientific methodological procedures for surgeons and also for physicians of other qualifications, which procedures were concerned with the problems of tactics and methods of investigation for these patients, advice for early surgery, the choice of the type of anesthesia, and the post-operative treatment of such patients.

The Department of Public Health of the U.S.S.R. in 1958 approved a new regulation concerned with city emergency wards. This regulation more clearly established the duties of the medical staffs of these wards in aiding patients with complaints requiring immediate surgery, and it outlined norms for ambulance stations and radio communication between emergency wards. The number of ambulances in emergency stations increased from 3,441 in 1955 to 4,535 in 1957. The number of patients aided by these stations rose from 9,212,000 in 1955 to 13,584,000 in 1957, and in village districts from 84,000 to 122,000 per year.

The indices of medical services for patients with intestinal blockage at the present time still cannot be considered satisfactory, and for the organizations of the Public Health and the entire surgical and non-surgical medical community this problem requires immediate concern.

In regard to the further development of traumatology and orthopedics (section of traumatologists), the following were accepted in the policy decisions of the 26th Congress of Surgeons: the expansion and introduction of effective surgical methods for the treatment of fractures, the elaboration to the expansion of the whole system and the preparation of young specialists, the improvement of the pedagogy of traumatologists and orthopedists for the students of the medical schools of higher education, the improvement of the special equipment and instrument supplies of medical organizations and the creation of an institute of many

specialists - traumatologists and orthopedists.

In order for the fulfillment of these decisions by the scientific and medical organizations of the U.S.S.R., major research work is conducted on the problem of elaborating indications and contraindications in relation to the choice of surgical methodology for the treatment of various types of fractures. Work is conducted on the precise definition of methods for the application of various types of devices used in osteosynthesis: variously constructed metal rods, plates, special supports with "girders", wire and struts. Researches on the application of supports made of biological materials (grafts) and with absorbent plastic materials is in progress.

The results of treatment in the most difficult cases of fractures of the tibia were summarized in the All-Union Conference of Surgeons and Anesthesiologists in 1958.

The Department of Public Health of the U.S.S.R. (7/12/1958) issued decree no. 125 on the prophylaxis of trauma, and the improvement of traumatological and orthopedic help for the population. The bed total averages were worked out in accordance with this decree.

The system for the development of emergency aid was worked out for the population as a whole and separately for the workers of the leading branches of industry (coal, oil, metallurgy, mechanical engineering and others). The organization of departments of traumatology and orthopedics were established in several medical institutes, and an institute was created for district and city specialists, traumatologists and orthopedic surgeons.

The decree, no. 108, of the Department of Public Health of the U.S.S.R. (7/18/1958) "On the Complements of the Permanent Medical Staffs of City Organizations of Preventive Medicine", established new norms for groups supplying traumatological and orthopedic aid, and this decree revised the standards for receiving out-patients.

In the elapsed period of time the number of beds for traumatology and orthopedics increased by more than 3,000 and the number of physicians and traumatologists increased by 161. Departments of traumatology and orthopedics were organized in accordance with decree no. 125 (8/12/1957) in Stalino, Minsk, Alma-Ata, Karaganda, Riga, Tashkent, Kharkov, Kiev, Dniepra-Petrovsk and other medical institutes. Work was also conducted in relation to industrial injuries.

Papers of the 26th All-Union Congress of Surgeons were published in the amount of 10,000 copies and mailed to all Republics.

The Congress played an enormous organizing role for the whole surgical community, contributed to the raising of qualifications for the surgeons of the country, and also established a basis for communication with foreign scientists, especially those of the countries of the Popular Democracies.

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